Title (en)

ID-OD DISCRIMINATION SENSOR CONCEPT FOR A MAGNETIC FLUX LEAKAGE INSPECTION TOOL

Title (de)

ID-OD-DISKRIMINIERUNGSSENSOR-KONZEPT FÜR EIN WERKZEUG ZUR INSPEKTION VON MAGNETFLUSSLECKS

Title (fr)

CONCEPT DE CAPTEUR DE DISCRIMINATION DIAMETRE INTERIEUR/DIAMETRE EXTERIEUR POUR UN OUTIL D'INSPECTION DE FUITES A FLUX MAGNETIQUE

Publication

EP 1735612 A1 20061227 (EN)

Application

EP 05732756 A 20050328

Priority

- US 2005010295 W 20050328
- US 82587304 A 20040415

Abstract (en)

[origin: US6847207B1] An instrument pig and method of operation thereof for determining the characteristics of a ferromagnetic pipeline through which it passes, including a pig body, first and second coaxial circumferential, spaced apart magnets of opposed polarities supported to the pig body and providing substantially complete magnetic saturation of an area of the pipeline between the magnets, first instruments between the magnets and arranged to generate signals that are responsive to flux leakage servicing to provide first information as to anomalies in the pipeline interior and/or exterior surfaces, second instruments supported by the pig body between said magnets and arranged to generate signals that are responsive to eddy currents induced in the pipeline interior surface servicing to provide second information as to anomalies in the pipeline interior surface, signal processing circuitry combining the first and second signals and wherein the second instruments are energized only in response to signals generated by said signal processing circuitry.

IPC 8 full level

G01N 27/72 (2006.01); **F16L 55/26** (2006.01); **G01N 27/82** (2006.01); **G01N 27/87** (2006.01); **G01N 27/90** (2006.01); **G01R 33/12** (2006.01)

CPC (source: EP US)

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Designated contracting state (EPC)

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Designated extension state (EPC)

AL BA HR LV MK YU

DOCDB simple family (publication)

US 6847207 B1 20050125; AU 2005238857 A1 20051110; AU 2005238857 B2 20100218; BR PI0509943 A 20070925; CA 2560749 A1 20051110; CN 100523801 C 20090805; CN 1942762 A 20070404; EP 1735612 A1 20061227; EP 1735612 A4 20090610; MX PA06011921 A 20070125; NO 20064779 L 20061227; RU 2006140242 A 20080520; RU 2364860 C2 20090820; WO 2005106451 A1 20051110

DOCDB simple family (application)

US 82587304 A 20040415; AU 2005238857 A 20050328; BR PI0509943 A 20050328; CA 2560749 A 20050328; CN 200580011154 A 20050328; EP 05732756 A 20050328; MX PA06011921 A 20050328; NO 20064779 A 20061018; RU 2006140242 A 20050328; US 2005010295 W 20050328